who walked a distance of 120 miles, six months after the operation, in seven days.—Brit. Med. Jour., Feb. 19, 1887.

H. PERCY DUNN (London).

IV. Transplantation of Bone for Ununited Fracture. A. Poncer (Lyons). Patient, aged 19, with ununited fracture of tibia (compound). Thirteen months since accident. Bone transplanted between the fragments was the first phalanx of the great toe of an amputated leg (minus the articular ends).

Antiseptic precautions were taken and the graft soaked in sublimate solution before insertion. The graft lived, but the operation was not successful in securing bony union.—Lancet, May 28, p. 1,102.

C. B. KEETLEY (London).

GYNÆCOLOGICAL.

I. On the Frequency of Malignant Growths of the Ovaries and Their Operative Treatment. By Prof. LEOPOLD. Careful study of the finer structure of these neoplasms during the past fifteen years has demonstrated the fact that their malignant nature is much more frequent than was formerly supposed. Observations on the nature and frequency of these malignant tumors have been made by numerous authors, such as Olshausen, who reported 14 cases of sarcoma in his own practice. Cohn found among 600 ovariotomies of Schroeder 100 cases where the tumors were undeniably malignant or showed malignant degeneration. The tabulated list of these cases shows a percentage of 16.6 for the malignant nature of all ovarian tu-This is of much importance in regard to the question of desirability of removing such malignant growths. Permanent recovery in such cases was once held to be very questionable and rare. Observations, however, of Schroeder show that 16.6% of his ovariotomies revealed malignant tumors, and that 19.5% of the operated cases of this kind remained free from a return of the disease for more than a year, i. e., recovered. Cohn, therefore, concludes from this, that all proliferating neoplasms of the ovaries, even of both ovaries, should be removed as quickly as possible. If an operation be delayed until all indications, as given by Wells and others, shall have appeared, the

strength of the patient will be much exhausted and her general condition have suffered greatly; in many cases the operation will be undertaken too late, the surrounding parts having become involved by the neoplasm.

In considering the importance of this subject, and in connection with the fact that almost the fifth portion of these patients operated for malignant tumors remained healthy for longer than a year, author thinks it worthy of consideration to ascertain the number of malignant tumors found, on the average, in 100 cases of ovariotomy; how many of such were removed and how many were not removable; furthermore, how many patients died sooner or later after the operation; how many should be considered as permanently cured, and finally, of what value for future therapeutics are these observations. As an answer to these questions, author gives the results, etc., of 110 cases of ovariotomy performed by himself. In observing these it will be seen that the percentage of malignant neoplasms is a higher one than in the cases of Schroeder. On the other hand, however, the number of recoveries is highly satisfactory.

Malignant tumors were removed in 20 of these 110 completed ovariotomies, =18.1%. Add to this 6 cases where incision into the abdomen revealed the uselessness of operating (the surrounding parts having become involved by the disease), we shall have 26 malignant tumors in 116 ovariotomies, =22.4%, a number exceeding that of Schroeder by about 6%. Four of these 110 cases of completed ovariotomy died of septic poisoning, =3.6%, none of which, however, had malignant growths. Of the 26 cases with malignant tumors, 5 (or 19.1%) died from rapid loss of strength. Of the 6 cases, mentioned above, where laparotomy only was made, 3 died within the first six weeks, from loss of strength; one died immediately after the operation, one four months afterwards, whilst one recovered.

Of the 20 cases of malignant growths and in which the operation was completed, four died soon after from great loss of strength; four made a complete recovery, one and one-half to three and one-half years having now elapsed since the operation; 9 died from return of the disease, within one to twelve months afterwards. In regard to the

three remaining cases, the time of observation has been too short for drawing conclusions. No return of the disease has, however, appeared in them.

From this it will be seen that 20% of those cases with malignant growths and in which the operation was completed, made a recovery. The author, therefore, agrees with Cohn, that every proliferating ovary tumor should be removed as soon as possible. Two of these 4 cases were afflicted with very large papillary cystoma. No puncture had been made and the contents had not escaped. Examination of the serosa, especially in the cavity of the pelvis, during the operation, did not reveal any infection of these parts. The third case was one of bi-During the two years previously, patient lateral papillary cystoma. had been punctured four times, there escaping always some sticky, yellowish fluid. The cyst was adherent to the abdominal wall in several places and to the intestines, giving rise to much hemorrhage when tearing it off. The fact is considered noteworthy, that around the cicatrices where puncture had been made, the most luxurious papillomatous excrescences were found. The removal of the many small excrescences required great care and labor. The patient has survived for three years and shows no signs of any return of the trouble. fourth case, that of a young woman, æt. 18, was a poor one, as the patient was greatly reduced in strength. The tumor was hard, with uneven surface and having a pedicle 20 ctm. in length. Microscopic examination showed it to be a round-cell sarcoma. No spreading of the disease to other parts was detected. Three and a half years have elapsed since the operation and the patient enjoys the best of health, showing no signs of relapse.

Author thinks that further observation on this subject, the comparison namely of benignant and malignant growths in regard to their operative removal, will eventually lead to generally establishing the rule of removing even very small neoplasms of the ovaries as soon as they show steady increase of size, and especially when they are bi-lateral.—Deutsch. Med. Wochenschrift, No. 4, Jan. 4, 1887.

C. J. COLLES, (New York).

II. A Case of Ovariotomy Followed by Secondary